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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,131	11/20/2000	James Thomas Edward McDonnell	1509-135	6368

22879 7590 09/23/2005

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EXAMINER

IQBAL, KHAWAR

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/715,131	MCDONNELL ET AL.	
	Examiner	Art Unit	
	Khawar Iqbal	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31,33,35-47,52-56,60,61,63 and 67-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31,33,35-47,52-56,60,61,63 and 67-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 52-56,59,68,70-78 are rejected under 35 U.S.C. 102(e) as being unpatentable by Rautila (20040171378).

Regarding **claim 52** Rautila teaches a method of data transfer by using first and second communication links of differing bandwidths between a network and a mobile device, the first link having a narrower bandwidth than the second link, the method comprising (fig. 1): entering data into the mobile device (para. # 0024-0025, 0030-0032); notifying the network of data awaiting transfer thereto from the mobile device by transmitting a first signal from the device to the network via the first link (para. # 0024-0025, 0030-0032); and then transferring the data from the mobile device to the network by transmitting a second signal from the device to the network via the second link (para. # 0024-0025, 0030-0032).

3. Regarding **claim 53** Rautila teaches a data transfer system comprising (fig. 1): a network, a mobile device (10), a first transmitter and a second transmitter, the network being adapted to contain data, the mobile device being adapted to receive signals from

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both the first and second transmitters (para. # 0024-0025, 0030-0032), the first transmitter being adapted to transmit a first narrow bandwidth long range signal (mobile network 80) to the mobile device via a first narrow bandwidth long range channel, the first signal indicating data on tile network are available to be transferred to the mobile device (para. # 0024-0025, 0030-0032), the second transmitter being adapted to transmit to the mobile device via a second wide bandwidth short-range channel (hotspot network), a second wide bandwidth short range signal including the data, device and the first transmitter being arranged for selectively causing the first transmitter to transmit the data via the first channel and enabling the mobile device to selectively receive the data via the first and second channels (para. # 0024-0025, 0030-0032).

Regarding **claim 54** Rautila teaches wherein the first transmitter is arranged to operate at a frequency within the range selected from group (i) about 900 MHz to about 1900 MHz; (ii) about the 2 GHZ band (para. # 0024-0025, 0030-0032).

Regarding claim 55 Rautila teaches wherein the second transmitter is arranged to operate at a frequency within the range of the order of 1 GHZ to the order of a few tens of GHz (para. # 0024-0025, 0030-0032).

Regarding **claims 56,59** Rautila teaches the second transmitter includes a wireless LAN base Station (cellular and hotspot) (para. # 0024-0025, 0030-0032).

Regarding claims 70-72 Rautila teaches (para. # 0024-0025, 0030-0032).

Regarding claims 73,31,33,63 Rautila teaches a method of data transfer between a mobile device and a communications network via a first narrow bandwidth long-range

channel the network including plural second wideband width short-range channels at different locations, the method comprising (fig. 1):

transferring a message to the device from the network via the first channel, the message indicating that data desired to be transferred to the device (para. # 0024-0025, 0030-0032);

selectively transmitting the data via the first channel(para. # 0024-0025, 0030-0032); and

selectively receiving the data at the mobile device via the first and second channels (para. # 0024-0025, 0030-0032).

Regarding **claim 74** Rautila teaches providing a user of the mobile device with an indication of at least one of the different locations, and performing the selective data-receiving step based on the indication of the at least one location (para. # 0024-0025, 0030-0032).

Regarding **claims 68,75** Rautila teaches wherein the data is selectively received via the second channel in response to an indicated location being close enough to the mobile device such that the data can be transmitted to the mobile device via the second channel associated with the close-enough channel (para. # 0024-0025, 0030-0032).

Regarding **claims 76 and 78** Rautila teaches wherein the data is selectively received via the first channel in response to all indicated locations being far enough from the mobile device such that the data cannot be transmitted to the mobile device via any of the second channel (para. # 0024-0025, 0030-0032).

Regarding **claim 77** Rautila teaches a method of data transfer between a mobile device and a communications network via a first narrow bandwidth long-range channel, the network including plural second wideband width short-range channels at different locations, the method comprising (fig. 1);

transferring a message to the device from the network via the first channel, the message indicating that data is desired to be transferred to the device providing a user of the mobile device with an indication of at least one of the different locations (para. # 0024-0025, 0030-0032);

causing the mobile device to be close enough to one of the provided locations to enable the mobile device to receive a message via the second channel associated with the location and transferring data to the device from the network via the channel associated with the location (para. # 0024-0025, 0030-0032).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31,33,63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al (6665711) and further in view of Esmailzadeh (20040203626).

6. Regarding **claim 31** Boyle et al teaches apparatus for transferring data from a network to a mobile device comprising (fig. 2):

a transmitter arrangement having differing narrow (204) and wide bandwidths (206) for transmitting data from the network (208) to the mobile device (106) (col.3, lines 31-45, col.), lines 55-67);

the transmitter arrangement being arranged for notifying the mobile device (106) of data awaiting transfer thereto from the network (208) via the first, lower bandwidth (204) (col.2, lines 21-34, col. 7, lines 44-55); and

the transmitter arrangement being arranged for transferring the data to the mobile device (106) via the wide bandwidth (206) (col. 2, lines 50-62, col. 8, lines 11-16). Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature (as applicant's Arguments).

On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the moving terminals. The terminals then transmit data to the station based on the indicated schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al by specifically

adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh.

Regarding **claim 33** Boyle et al teaches a method of data transfer by using first and second communication links of differing bandwidths between a network and a mobile device, the first link having a narrower bandwidth than the second link, the method comprising (fig. 2):

notifying the mobile device of data awaiting transfer thereto from the network by transmitting a first signal from the network to the device via the first link (col.2, lines 21-34, col. 7, lines 44-55); and

then transferring the data from the network to the mobile device by transmitting a second signal from the network to the device via the second link (col. 2, lines 50-62, col. 8, lines 11-16). Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature (as applicant's Arguments).

On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the moving terminals. The terminals then transmit data to the station based on the indicated

schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al by specifically adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh.

Regarding **claim 63** Boyle et al teaches a method of transferring data between a mobile device arrangement and a network arrangement via first and second communications links between the device arrangement and network arrangement, the first and second links respectively having narrow and wide bandwidths, the method comprising (fig. 2): sending a first narrow bandwidth signal from a first of the arrangements to the second of the arrangements via the first link (col.2, lines 21-34, col. 7, lines 44-55), the first signal indicating that the first arrangement is ready to transmit data to the second arrangement (col.2, lines 21-34, col. 7, lines 44-55), then sending a second wide bandwidth signal from the first arrangement to the second arrangement via the second link, the second signal including the data (col. 2, lines 50-62, col. 8, lines 11-16). Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature (as applicant's Arguments).

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On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the moving terminals. The terminals then transmit data to the station based on the indicated schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al by specifically adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh.

Claims 35-45,47,67,69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al (6665711) and further in view of Esmailzadeh (20040203626) and Rautila (20040171378).

Regarding **claims 35-45,47,67,69** Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature.

On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the moving terminals. The terminals then transmit data to the station based on the

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indicated schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al by specifically adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh. Boyle et al teaches all the element of the claimed invention, Boyle et al and Esmailzadeh do not specifically teach executed by software, short range (unlicensed), transferring a decryption key from the network to the mobile device via the first link; and then transferring the data in encrypted form, based on the key, from the network to the mobile device via the second communication link. On the other hand, Rautila teaches executed by software, short range (unlicensed), transferring a decryption key from the network to the mobile device via the first link; and then transferring the data in encrypted form, based on the key, from the network to the mobile device via the second communication link (para. # 0024-0025, 0030-0032). The method involves accessing an electronic shop server and ordering a digital product from the server using a mobile device with cellular phone capability. A hotspot network location is identified where the digital product may be downloaded into the mobile device using a short-range transceiver embedded in the mobile device. The mobile device detects a low power radio frequency signal generated by the hotspot network location. The digital product is downloaded into the mobile device by the hotspot network location transmitting the digital product using the low power radio frequency signal to the short-range transceiver of the mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al and Esmailzadeh by specifically adding feature executed by

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software, short range (unlicensed), transferring a decryption key from the network to the mobile device via the first link; and then transferring the data in encrypted form, based on the key, transfer of digital data to a mobile devices taught by Rautila.

7. Claim 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al (6665711) and further in view of Esmailzadeh (20040203626) and Aho et al (6198941).

Regarding **claim 46** Boyle et al and Esmailzadeh do not specifically teach GPS.

In an analogous art, Aho et al teaches determining the location of at least one of the mobile devices and a base station of the second communication link by using GPS (col. 6, lines 12-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al and Esmailzadeh by specifically adding feature, Improves data transfer in the communication device as taught by Aho et al.

8. Claims 60,61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rautila (20040171378) and further in view of Aho et al (6198941).

Regarding **claims 60,61** Rautila does not specifically teach GPS.

In an analogous art, Aho et al teaches determining the location of at least one of the mobile device and a base station of the second communication link by using GPS (col. 6, lines 12-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Rautila by specifically adding feature, Improves data transfer in the communication device as taught by Aho et al.

Response to Arguments

Applicant's arguments filed 7-30-04 have been fully considered but they are not persuasive. Examiner has thoroughly reviewed applicant's arguments but firmly believes the cited reference to reasonably and properly meets the claimed limitations. Applicant's argument was that "the allegations in the Office Action that these features are disclosed in paragraphs (0024), (00252), and (00302)-(00321) of Rautila are simply incorrect. None of these paragraphs mentions notification, and no rationale is provided as to why notification would be inherent". In response, examiner would like to point out that Rautila very clearly states, If, in operation 380, the user 20 decides to download the digital product at a hotspot network 50 location, processing proceeds to operation 390 where a list of the local hotspot network 50 locations is presented to the user 20. Thereafter, whether the user 20 decides to have the electronic product downloaded at a hotspot network 50 location or via the cellular phone capability of the mobile station 10, a unique order number is transmitted to mobile station 10 by the electronic shop server 40 in operation 400 (para. # 0031).

In response to applicant's arguments against the references individually, Boyle et al teaches to extract the latest updating whenever necessary without suffering cost that can not be controlled by a user nor increasing unneeded network traffic by notifying a client device subscribing a page from a server device when the page of information is updated. When change or updating exists in information joined by a mobile device 106, a web server device 202 pushes notification or an electronic message to a link server device 114. A messenger 208 of the link server device 114 sends the received

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notification to the mobile device 106 through a narrow band channel 204. When a user desires updated information, the mobile device 106 accesses it through a pull engine 210 via a wide band channel 206 by using the address embedded in the updated information (col. 2, lines 21-62, col. 7, lines 44-55, figs. 1-3).

On the other hand, Esmailzadeh teaches a mobile communication equipment is provided with the base stations 100 and 101, the mobile terminals 110-115, transmission requests 120-122 and transmission schedules 130-132. The base station 100 and the mobile terminals 110-112 are connected by a radio communication channel and communication of the base station 100 and the mobile terminals 110-112 is performed inside a specified cell which is the communication area of the base station 100. The base station 100 and the mobile terminals 110-112 performs communication with the mobile terminals 113-115 inside the communication area of the base station 101 through a mobile communication switchboard. In this case, after transmitting the alert signal for indicating that the transmission request is present from the plural mobile terminals to the base station and deciding the transmission schedule, data packets are transmitted and received by radio communication between the base station and the mobile terminal (col. 1, line 30-col. 2, line 20).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Khawar Iqbal whose telephone number is (571) 272-7909.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

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only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Khawar Iqbal


**CHARLES APPIAH
PRIMARY EXAMINER**